

Brunswick

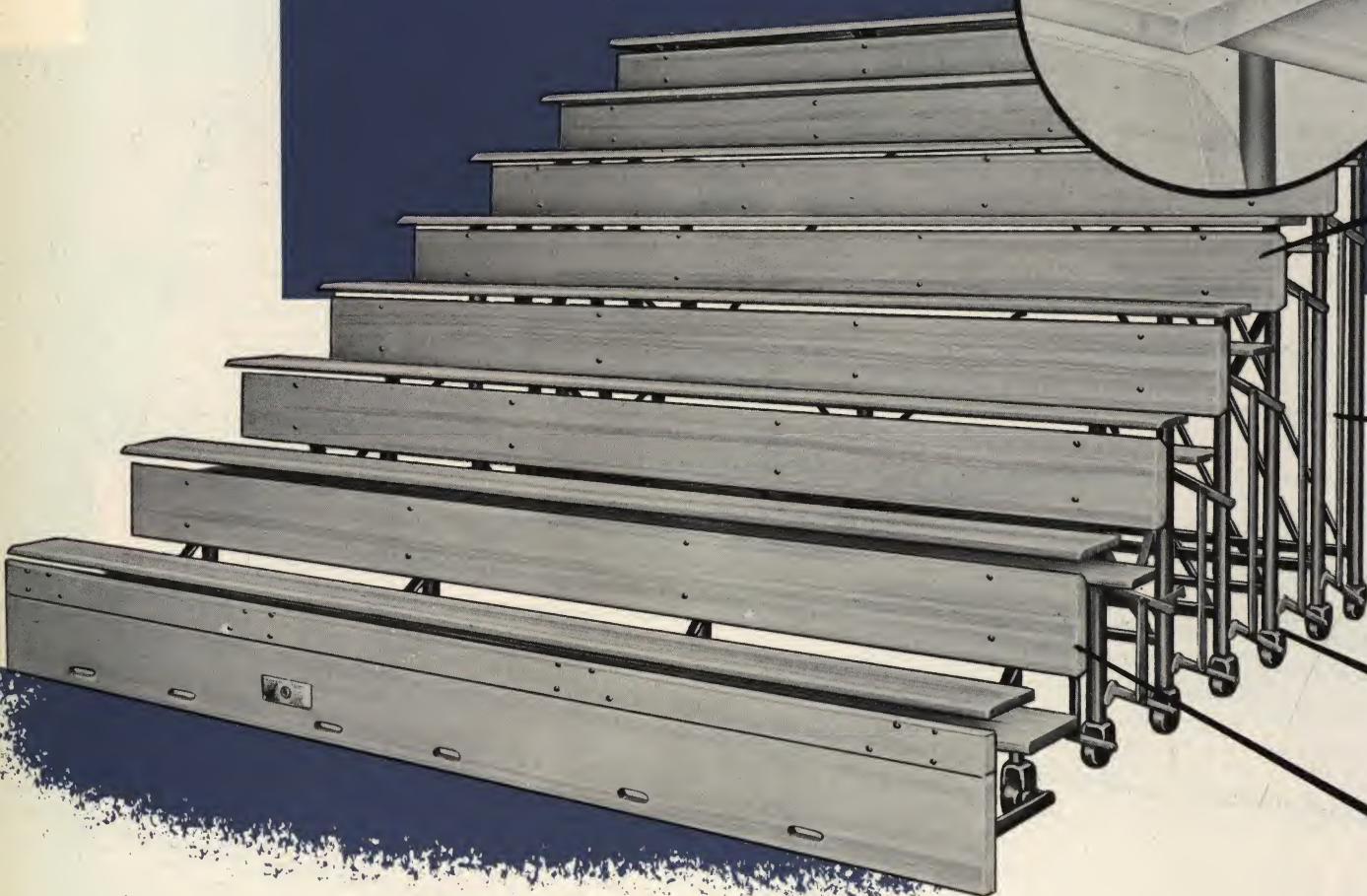
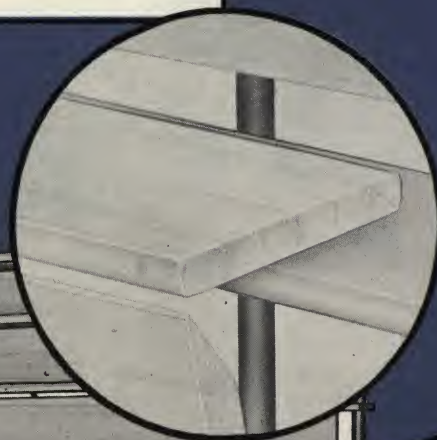
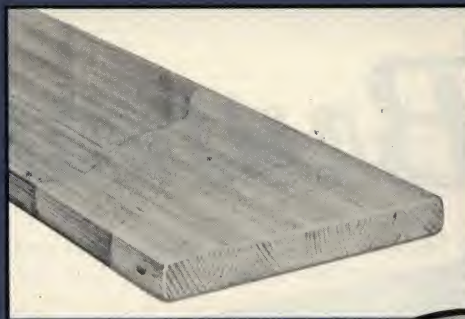


**FOLDING GYMNASIUM
SEATING**



RESILIENT FINISH

Prior to waxing, all unitboards are carefully sanded and factory finished with two coats of the same Urea synthetic finish used on Brunswick bowling alleys. This unique finish literally flexes under impact.



Brunswick

FOLDING GYMNASIUM SEATING

- Custom design for maximum utility
 - Superior engineering for greater comfort
- Superior materials for longer life
 - Superior construction for minimum maintenance

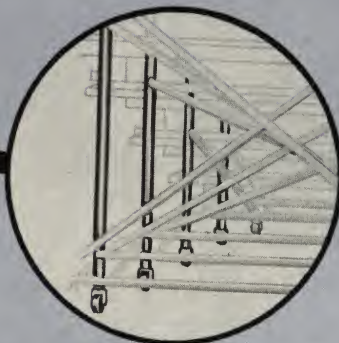
LAMINATED BOARDS

Seatboards and footboards edge laminated under Brunswick's own factory supervision—another exclusive—are made from 1½" vertical grain Douglas Fir. Vertical, edge grain laminated under hydraulic pressure to provide greater strength. And surface-pressure glued floating dowels prevent checking or splitting. Unique assurance of life-time, warp-free service.



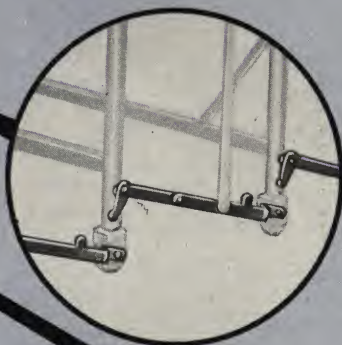
SKIRTBOARDS

All Brunswick seating is equipped with skirtboards designed to prevent basketballs and other objects from becoming lodged under the unit. And in the closed position the skirtboards slope out to form a smooth, handsome enclosure for the entire unit.



TUBULAR SUPPORT COLUMNS

Four column support assemblies for each full length sixteen foot seating unit provide maximum stability . . . allow construction for greater seating capacity. Each column is heavy gauge tubular steel to provide maximum strength. And all vertical supports are joined together with steel to steel crossbraces to prevent side sway.



POSITIVE ROW LOCKING

Brunswick's positive row locking provides maximum versatility and protection in gymnasium seating. It features a synchronized locking principle that automatically locks each row of seating in the open position as seating is pulled out from the wall. Prevents accidental folding by unauthorized persons.

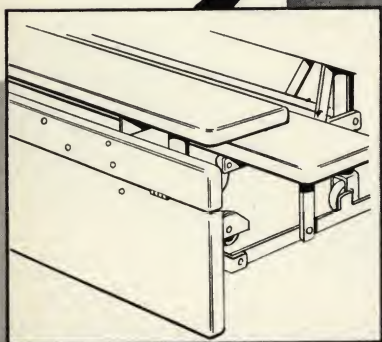
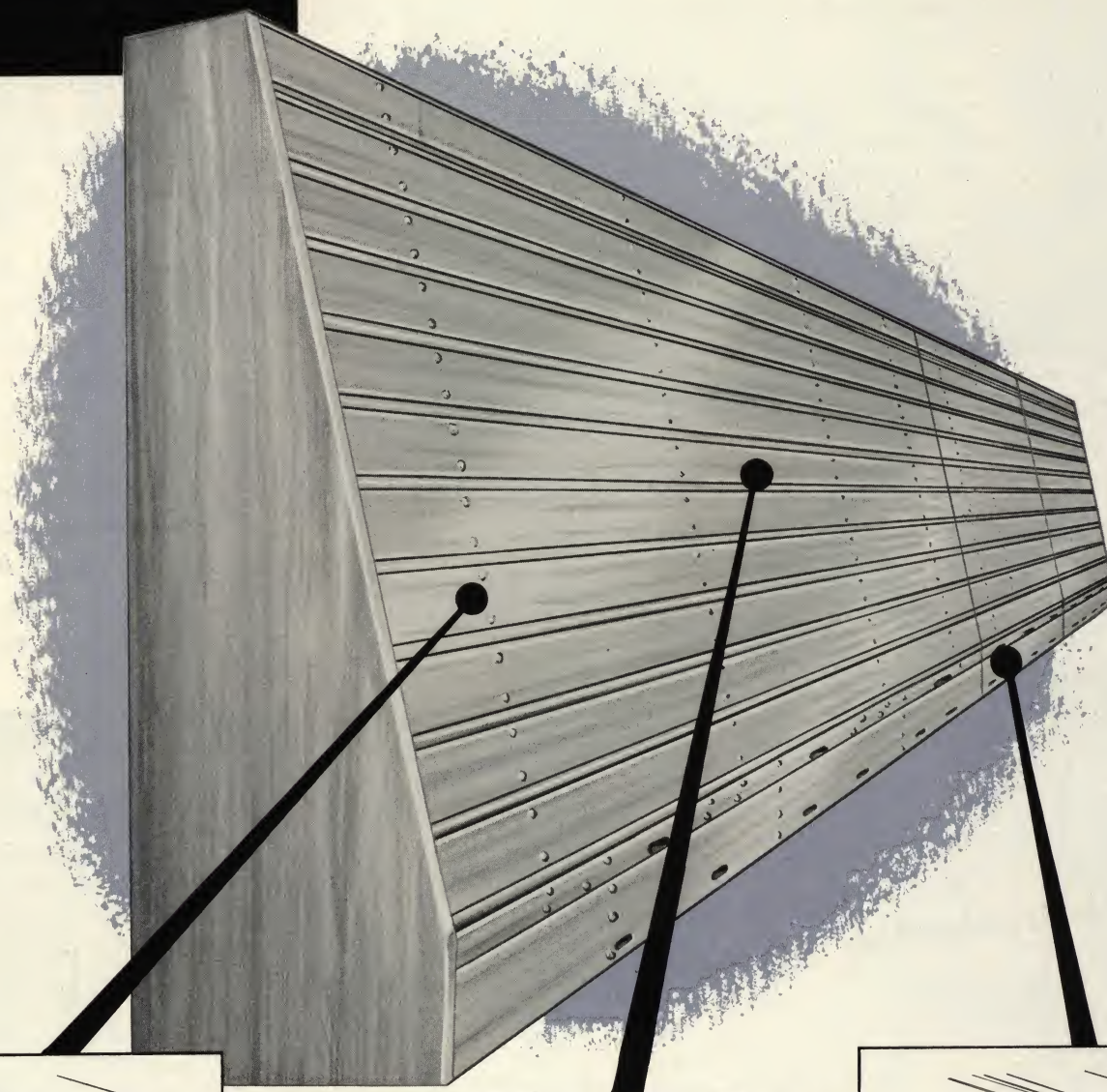


FOOT FREEDOM

Uniquely constructed skirtboards slope a full 2½" back from the leading edge of the seatboard to allow more comfortable seating and greater provision for leg and foot freedom. The space economy of Brunswick's exclusive skirtboard design provides maximum foot freedom in a minimum space . . . provides room where it counts—for construction of additional rows of seating.

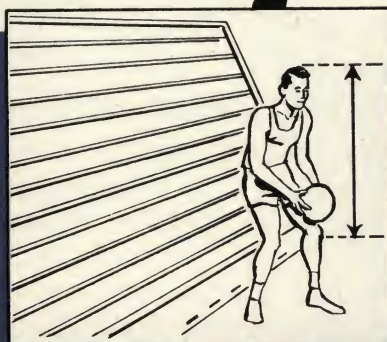
Brunswick

FOLDING GYMNASIUM SEATING



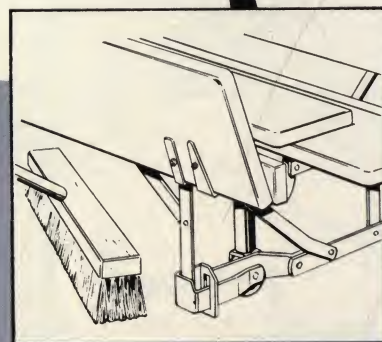
SKIRTBOARD UTILITY

Brunswick skirtboards are neither sat on nor walked on in the open position, thus assuring a clean, smooth surface in the closed position when the scuff and scratch-free skirtboards form the front of the unit. Just like a handsome piece of living room furniture!



PROTECTIVE SLOPING FRONT

Brunswick Folding Gymnasium Seating forms a solid, inclined front with no protruding edges or parts to cause injury in the event of a fall or collision.

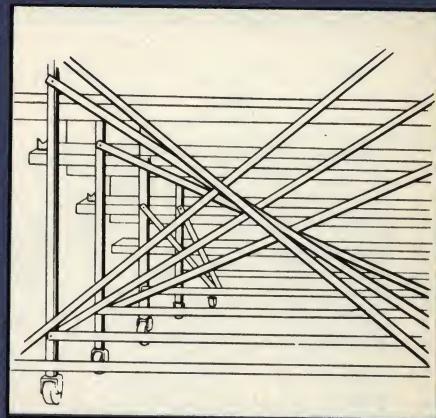
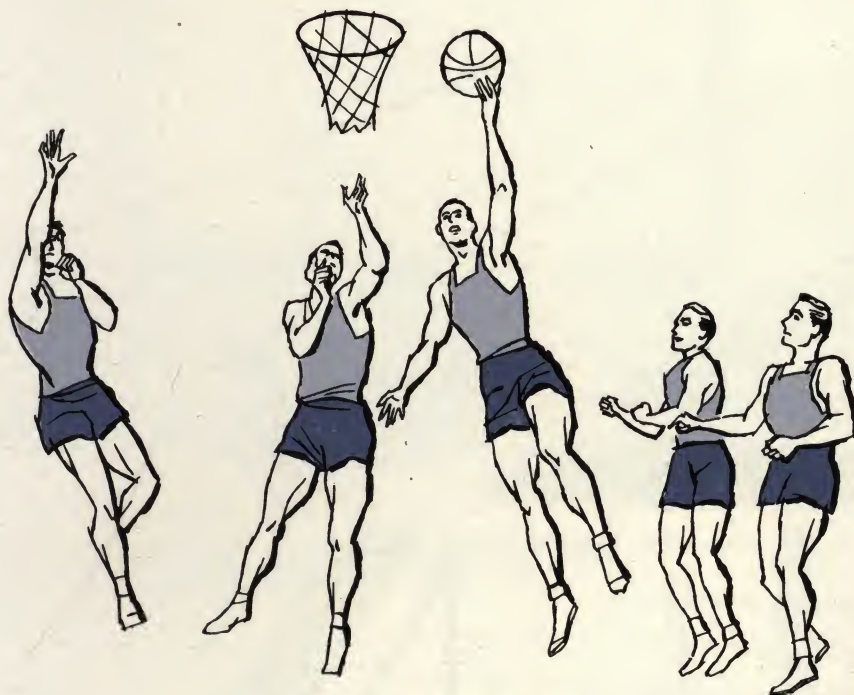


MAINTENANCE

Sturdy construction keeps maintenance at a minimum. Footboards tilt into a vertical position when the unit is being closed, allowing miscellaneous objects to fall *in front* of the unit for easy recovery. And wall attachments eliminate the need for troublesome floor anchors.

HANDSOME, RUGGED AND DURABLE

23i
Ho

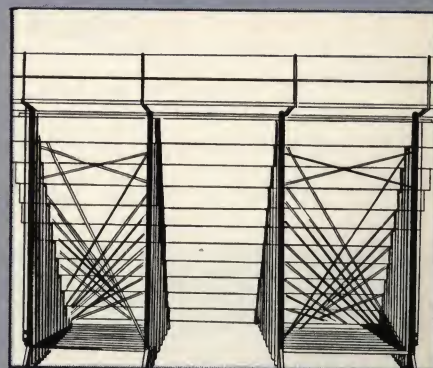


CROSS-BRACED UNDERSTRUCTURE

All vertical, tubular support column assemblies are connected with heavy duty "X" type cross bracing to provide additional strength and rigidity under a live load, and to compensate for sway factor.



Brunswick Folding Gymnasium Seating is quality engineered for superior strength. Its heavy gauge steel and scaffold-type understructure have made it the architects' favorite.

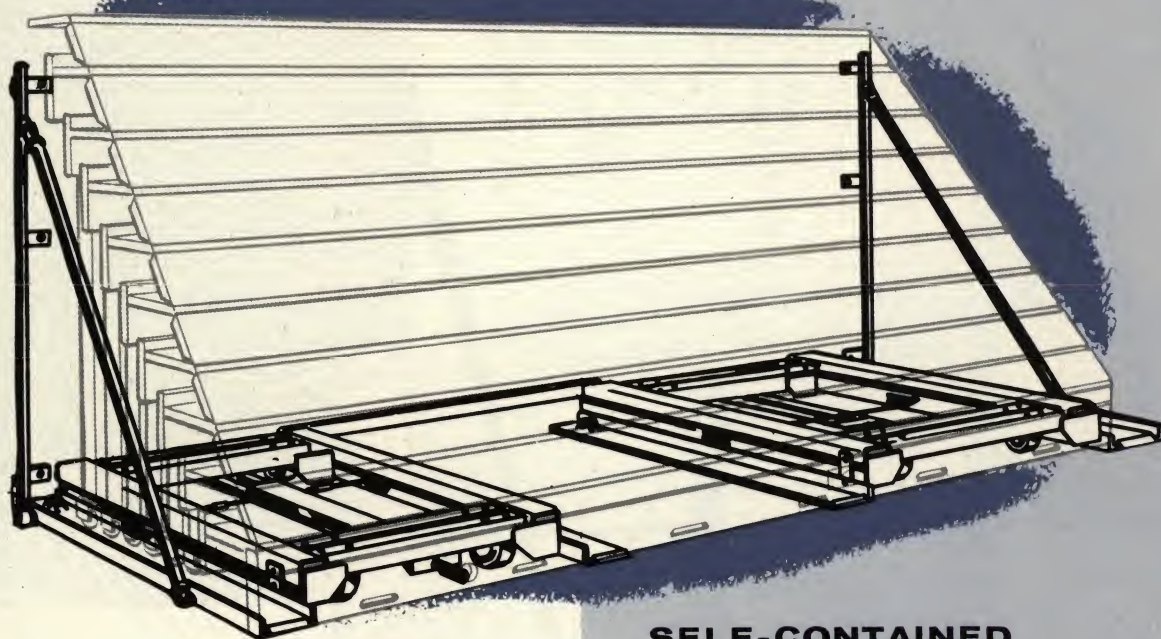


EVEN LOAD DISTRIBUTION

The live load of each sixteen foot unit is evenly distributed and supported by four tubular steel support assemblies . . . a plus factor of safety that is built into every unit. No loads requiring special support are imposed on wall structure.

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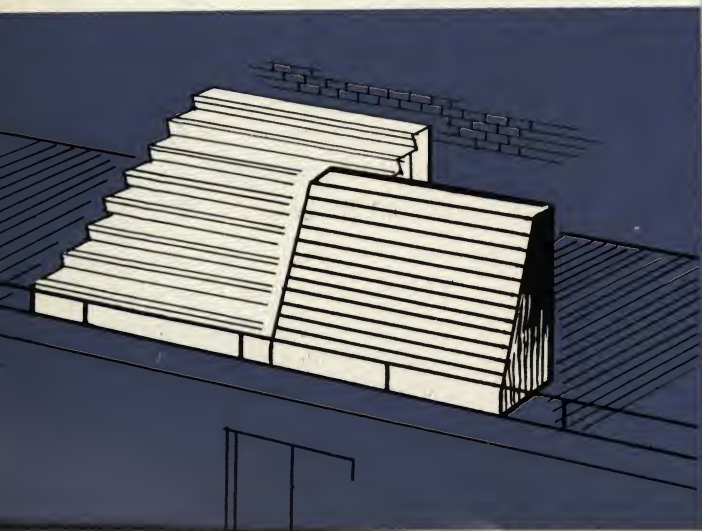
THE QUALITY STANDARD



SELF-CONTAINED MOBILE UNIT

Brunswick's new self-contained mobile unit provides the ultimate in gymnasium seating flexibility. This unique portable unit features a self-contained mechanical lifting system to provide not only easy mobility and versatility, but maximum protection to the gymnasium floors as well. What's more, this compact unit is ideal for gymnasium balconies, where space is at a premium . . . actually allows the balcony to be used as an extra gymnasium and in the closed position it serves as a visual divider for added privacy.

Ideal for gymnasium balconies where space is at a premium, Brunswick's self-contained mobile unit allows the balcony to be used as an extra gymnasium. And in the closed position it serves as a visual divider for additional privacy.





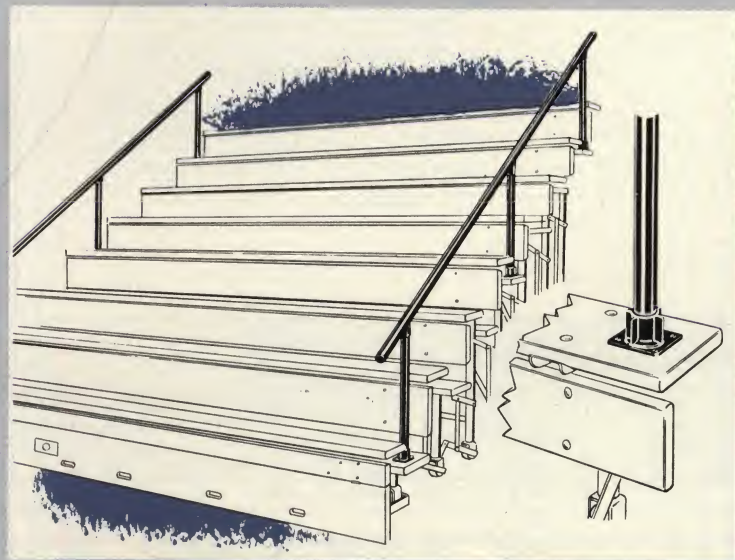
SINGLE ROW OPERATION

Unique construction of Brunswick Folding Gymnasium Seating allows individual operation of one . . . two . . . or as many rows as are needed. With Brunswick *automatic row locking*, the desired number of rows may be quickly and easily extended and locked into place.



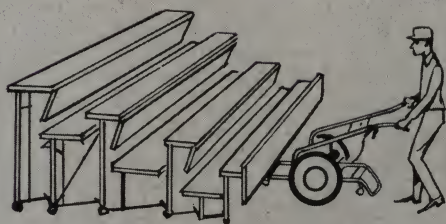
END PANELS

End panels on all Brunswick Folding Gymnasium Seating complete the protective enclosure and give the seating unit a clean, handsome, compact look as well.



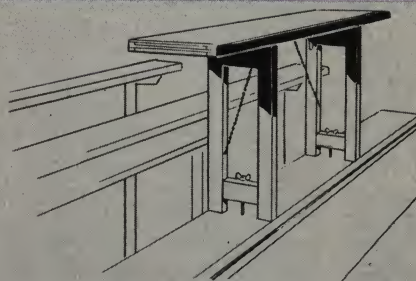
END RAILS

Removable end rails are also available. They can be quickly and easily inserted into built-in sockets to provide an added safety feature for the opened unit. And when not in use they can be conveniently stored within the unit.



MOTO-FOLDER

Brunswick's new Moto-Folder supplies the "muscle" which folds the entire structure into a compact unit in one continuous movement. Operates quickly, easily.



TIMER'S TABLE

The timer's table is another Brunswick plus. It is easily attached to any row, giving the scorer comfortable seating on the row above.

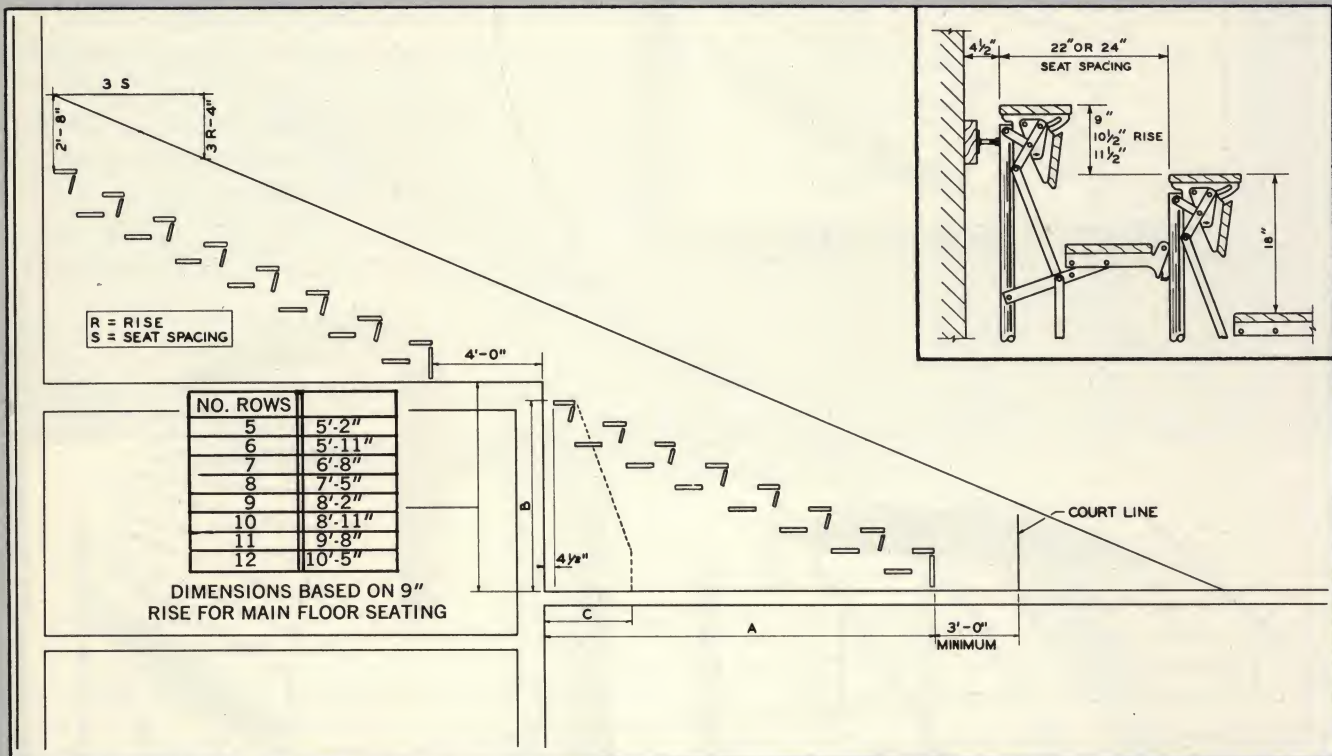


AISLES

Brunswick offers sure-tread, stadium-type aisles to implement and safeguard spectator control movement.

Brunswick CUSTOM DESIGNED SEATING

LINE OF SIGHT



SPACE REQUIREMENT CHART

Row	A 22" Depth Open	A 24" Depth Open	B Height 9"	Rise B Height 10 1/2"	B Height 11 1/2"	C Depth Closed	Seating Capacity 16" Per Seat 16' Unit	Seating Capacity 18" Per Seat 16' Unit
3	4' 10 1/4"	5' 2 1/4"	3' 0"	3' 3"	3' 5"	1' 9 1/8"	36	32
4	6' 8 1/4"	7' 2 1/4"	3' 9"	4' 1 1/2"	4' 4 1/2"	2' 1/2"	48	42
5	8' 6 1/4"	9' 2 1/4"	4' 6"	5' 0"	5' 4"	2' 3 7/8"	60	53
6	10' 4 1/4"	11' 2 1/4"	5' 3"	5' 10 1/2"	6' 3 1/2"	2' 7 1/4"	72	64
7	12' 2 1/4"	13' 2 1/4"	6' 0"	6' 9"	7' 3"	2' 10 5/8"	84	74
8	14' 0 1/4"	15' 2 1/4"	6' 9"	7' 7 1/2"	8' 2 1/2"	3' 2"	96	85
9	15' 10 1/4"	17' 2 1/4"	7' 6"	8' 6"	9' 2"	3' 5 3/8"	108	96
10	17' 8 1/4"	19' 2 1/4"	8' 3"	9' 4 1/2"	10' 1 1/2"	3' 8 3/4"	120	106
11	19' 6 1/4"	21' 2 1/4"	9' 0"	10' 3"	11' 1"	4' 1/8"	132	117
12	21' 4 1/4"	23' 2 1/4"	9' 9"	11' 1 1/2"	12' 1/2"	4' 3 1/2"	144	128
13	23' 2 1/4"	25' 2 1/4"	10' 6"	12' 0"	13' 0"	4' 6 1/8"	156	138
14	25' 0 1/4"	27' 2 1/4"	11' 3"	12' 10 1/2"	13' 11 1/2"	4' 10 1/4"	168	149
15	26' 10 1/4"	29' 2 1/4"	12' 0"	13' 9"	14' 11"	5' 1 5/8"	180	160
16	28' 8 1/4"	31' 2 1/4"	12' 9"	14' 7 1/2"	15' 10 1/2"	5' 5"	192	170
17	30' 6 1/4"	33' 2 1/4"	13' 6"	15' 6"	16' 10"	5' 8 3/8"	204	181
18	32' 4 1/4"	35' 2 1/4"	14' 3"	16' 4 1/2"	17' 9 1/2"	5' 11 3/4"	216	192
19	34' 2 1/4"	37' 2 1/4"	15' 0"	17' 3"	18' 9"	6' 3 3/8"	228	202
20	36' 0 1/4"	39' 2 1/4"	15' 9"	18' 1 1/2"	19' 8 1/2"	6' 6 1/2"	240	213
21	37' 10 1/4"	41' 2 1/4"	16' 6"	19' 0"	20' 8"	6' 9 7/8"	252	224
22	39' 8 1/4"	43' 2 1/4"	17' 3"	19' 10 1/2"	21' 7 1/2"	7' 1 1/4"	264	234
23	41' 6 1/4"	45' 2 1/4"	18' 0"	20' 9"	22' 7"	7' 4 5/8"	276	245
24	43' 4 1/4"	47' 2 1/4"	18' 9"	21' 7 1/2"	23' 6 1/2"	7' 8"	288	256
25	45' 2 1/4"	49' 2 1/4"	19' 6"	22' 6"	24' 6"	7' 11 3/8"	300	266
26	47' 0 1/4"	51' 2 1/4"	20' 3"	23' 4 1/2"	25' 5 1/2"	8' 2 3/4"	312	277
27	48' 10 1/4"	53' 2 1/4"	21' 0"	24' 3"	26' 5"	8' 6 1/8"	324	288
28	50' 8 1/4"	55' 2 1/4"	21' 9"	25' 1 1/2"	27' 4 1/2"	8' 9 1/2"	336	298
29	52' 6 1/4"	57' 2 1/4"	22' 6"	26' 0"	28' 4"	9' 7/8"	348	309
30	54' 4 1/4"	59' 2 1/4"	23' 3"	26' 10 1/2"	29' 3 1/2"	9' 4 1/4"	360	320

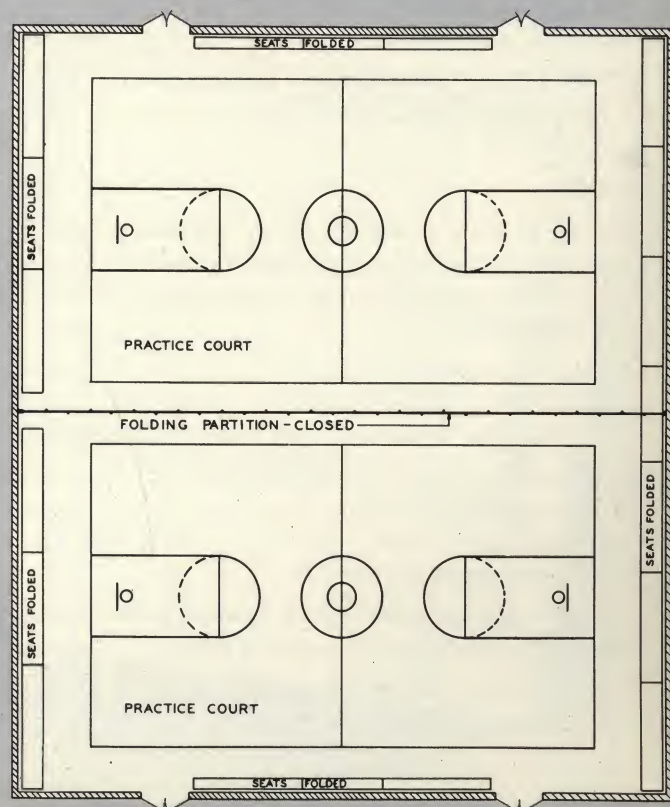
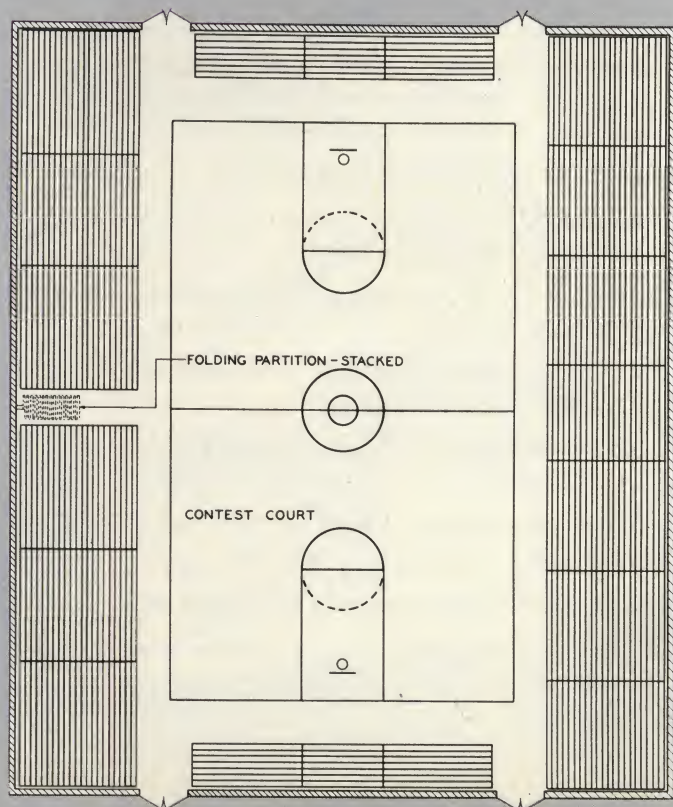
If other than 9, 10 1/2 or 11 inch rises are required please contact our factory or agent for recommendations

YOUR FOLDING GYMNASIUM SEATING BRUNSWICK PLANNING GUIDE

TEN POINTS TO CONSIDER

- **NUMBER OF COURTS**—Enrollment demands dictate early determination of whether one playing court will be adequate or whether folding partitions will be required to provide two or more practice courts.
- **COURT SIZE**—Regulation court sizes are as follows: College—94'x50'; High School—84'x50' (contest courts require minimum 3'0" clearance around court boundaries. When seats adjoin the court, 4'0" should be allowed between the court boundary and the first seat).
- **SEATING CAPACITY**—Student enrollment provides the basic seating requirement, which should then be modified in terms of community interest in the sport.
- **SPACE ECONOMY**—Since 2.5 sq. ft. per person is a commonly accepted seating allowance, it becomes more economical to plan for Brunswick unit standard lengths of 8'0", 10'0", 12'0", 14'0" and 16'0".
- **DOORWAYS**—Since improperly located doorways may result in a 15-20% loss of "good seats", plan to locate doorways in space adjacent to corners—preferably end-walls.
- **WALL CONSTRUCTION**—Construction utilizing piers, pilasters, ducts or furring should be avoided in gymnasium interior areas where seating is to be installed. Valuable seating space can be saved by utilizing filler boards across the front of the folding partition door stack. (To determine the necessary stack opening, add 12" to the folding partition door width.)
- **SEATING ATTACHMENT**—To allow full freedom for contraction and expansion of floating floors, folding gymnasium seating units should be wall attached rather than floor-anchored.
- **HEATING AND VENTILATING**—Seating units allow a 4½" wall-clearance for narrow grill-type radiators. Proper circulation of radiator air is provided by rail-type board construction available on Brunswick Folding Gymnasium Seating.
- **WINDOWS**—In the initial fenestration design, plan to have window sills located above the top row of gymnasium seating.
- **FUTURE NEEDS**—When budget demands restrict initial installation of folding gymnasium seating to a minimum, it is wise to provide the maximum number of rows and a *limited* number of seating sections rather than a maximum number of seating sections and a *limited* number of rows. (It is impossible to add rows later.) End-wall space may also be reserved for future seating additions.

GYMNASIUM PLAN TYPES



FOLDING GYMNASIUM SEATING SPECIFICATIONS

GENERAL SCOPE:

- A. Folding Gymnasium Seating shown in Architect's plans and specifications shall be as manufactured by The Brunswick-Balke-Collender Company, Kalamazoo, Michigan, or equal as approved by the Architect.
- B. Folding Gymnasium Seating shall be delivered and installed by manufacturer. The entire installation shall be guaranteed against faulty materials, workmanship and operation for a period of one (1) year.

EQUIPMENT REQUIREMENTS:

- A. Furnish* _____ Units as indicated on drawings and/or as scheduled below:
 1. ** _____ Sections _____ Rows High, _____' _____" Total Length, (9", 10½", 11½") Rise, (22" or 24") Depth.
 2. ** _____ Sections _____ Rows High, _____' _____" Total Length, (9", 10½", 11½") Rise, (22" or 24") Depth.
*Standard Units, Reverse Fold Units, Self Contained Mobile Units.
**A section is a continuous run of one or more adjacent Units.

B. ACCESSORIES:

Furnish accessories as indicated on drawings and/or as scheduled below:

1. _____
2. _____

3. OPERATION:

- A. Units shall be equipped with cylinder locks keyed alike. All rows shall extend and fold in a continuous action. One or more rows to be extended as desired.
- B. Each row shall individually and automatically lock open without the use of floor plates or shoes.
- C. Folding action shall be accomplished by precision folding arms.

4. DESIGN:

- A. Folding Gymnasium Seating shall be designed to support a live load of 120 pounds per lineal foot on both seat and foot boards and a horizontal swaying force of 24 pounds per lineal foot.
- B. Tubular steel columns (4 per 16'-0" unit) shall form all upright supports. Tubular steel columns shall be joined together with metal sway and cross braces to prevent side sway.
- C. Each support column shall have a heavy duty composition rubber wheel of 3" diameter ground and trued to prevent marring of floors. Wheel shall have an "OILITE" bushing for easy rolling action.
- D. Each unit shall be attached directly to wall allowing gymnasium floor to expand and contract freely.
- E. Units shall have full 18" chair height. Unit shall allow unrestricted movement of spectator's feet.

- F. Units shall have skirt boards to close the area beneath seat boards to prevent basketballs lodging beneath units. When units are closed skirt boards shall form face of units, which shall slope up and back to protect athletic participants from injury.

- G. Foot boards shall fold to vertical position causing debris to fall to floor. Tubular columns shall close in tandem to expose maximum floor space beneath units for removal of debris.

5. CONSTRUCTION:

- A. Manufacturer shall fabricate steel understructure and all wood members in his factories.
- B. Electric arc welding shall be utilized on all steel members. Welding shall be done by certified welders.
- C. Seat boards, foot boards and skirt boards shall be vertical grain Douglas Fir fabricated from selected kiln dried lumber. Pitch pockets, knots, shake, wane and other defects not permitted. Seat and foot boards shall be 1¼" thick before sanding. Seat boards shall be 9½" wide and foot boards shall be 11¼" wide.

Solid boards shall consist of individual rails edge laminated under pressure through use of electronic glue machines. Floating dowel pins shall be placed at ends of boards to prevent end splitting.

6. FINISH:

- A. All steel understructure shall be bonderized before finishing. Metal parts shall be finished in DuPont Olive Green enamel No. 4458.
- B. All wood parts shall be drum sanded, edges eased and final hand sanded before finishing. Finish shall consist of two (2) coats of Urea Based Synthetic finish on all finished sides of boards hand sanded between coats. The finish shall be dried under controlled temperatures. Paste wax shall be applied at Factory for maximum protection.

SECTION 2, PARAGRAPH B, ACCESSORIES (OPTIONAL):

1. **MOTO-FOLDER** units shall be furnished to close and open Folding Gymnasium Seating Units.
2. **AISLES** 3'-0" wide shall be furnished where indicated on Architectural drawings.
3. **REMOVABLE END RAILS** shall be furnished on open ends of Folding Gymnasium Seating sections.
4. **END PANELS** shall be furnished at open end of wall attached sections.
5. **REMOVABLE TIMERS TABLE** 8'-0" in length shall be furnished where indicated.
6. **BACK RESTS** shall be provided with Mobile units.
7. **REAR FILLER BOARDS** shall be furnished to close space between top seat board and wall where indicated. (Recommended when in excess of 10".)

Brunswick

PLANNING AND MAINTENANCE SERVICES
HELP YOU CUSTOM DESIGN A SOLUTION TO ANY GYMNASIUM
SEATING PROBLEM



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NATIONAL DISTRIBUTION—Local sales organizations to assist you with local planning problems.



BRUNSWICK TRAINED SUPERVISORS—Located in your area to assure proper installation.

GUARANTEE

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installed at the THE HORN DIVISION OF THE BRUNSWICK-BALKE-COLLENDER COMPANY, hereby
against defects in material or workmanship for a period of ONE (1) YEAR after the receipt of
the architect's final certificate of acceptance of the work. Any part of the above equipment which
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THE BRUNSWICK-BALKE-COLLENDER COMPANY
HORN DIVISION

By _____

GUARANTEED SERVICE—You receive a certificate guaranteeing your Brunswick installation.

Brunswick SERVES YOU ACROSS THE NATION



Folding Stages
Sweet's File No. 23g
Ho

Folding Partitions
Sweet's File No. 22d
Hor

Folding Backstops
Sweet's File No. 23k
Ho

Brunswick

SCHOOL EQUIPMENT DIVISION
BRUNSWICK-BALKE-COLLENDER CO.
KALAMAZOO, MICHIGAN

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